

EXPERIENCES OF COMPETENCE DEVELOPMENT IN HIGHER EDUCATION

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Abstract: Due to the Bologna process, higher education institutions have to offer competence-based courses. Changing the curricula to meet this expectation has been done in Hungarian higher education institutions, however, the evaluation of the success of this process is missing yet. In our research, we intend to measure the process and the outcomes of trainings (experience-based courses) offered at an economic and business administration faculty of a Hungarian university. For this, we adopt a complex approach, defining competence development outcomes as the technical quality of the service, while students' evaluations of the delivery of these new types of courses as the functional quality of the service.

1. Introduction

As a result of the implementation of the Bologna process, a competence-based approach of education has appeared and modules of skill development has been introduced in higher education. Institutions thus has to face a difficult challenge of promoting and assessing the development of competences [1]. In addition, in a competitive higher education environment institutions, department and course managers consider service quality a highly important issue. In this sector, it may have long term effects for both the student and the institution, as it may influence student recommendations as well as their future monetary support [2]. Another reason for the interest in service quality is that university quality assurance systems emphasize student experience as one of the assessment criteria [3].

These processes have led us to devise a research planned for the long-run about the outcomes of putting competence and skill development into practice. An important methodological issue in this field is how to measure competence and skill development. In addition, the questions of how students accept the new methods of teaching (experience-based, small-group trainings) and of what their opinions are about this have arisen. Another question we intend to answer is how this new method fits in with the educational culture of the faculty in which it was implemented. Also, after a period of offering and conducting our training courses, we had to formulate a further question: what are those competences that can be developed at all in a fulltime education.

2. Technical and functional quality of trainings offered in higher education

The questions presented above have led us to think about higher education outcomes complexly, realising the difficulties of evaluating the quality of services evidently applies here. The quality of the service (in our case, university courses of training) has different meanings for different people; for service providers (in our case, the institution and the lecturers or instructors of the trainings themselves) and for customers (in our case, the students).

As providers and customers have different knowledge and often there is an information asymmetry between them, we may differentiate between technical and functional quality. Technical quality relates to what has been provided during the service process, while functional quality relates to how the service was provided [4]. In our consideration, this approach can certainly be applied in higher education. Technical quality refers to what competences are addressed during a training or other university course and the efficiency to achieve the development of these competences. Functional quality, on the other hand, refers to how these competences are developed: it is the environment, the

instructor, the method of teaching and student experiences: the process of the training which is important. We suppose that students' perceived quality of the service is affected by functional quality, while technical quality is related to the longer-term value of their knowledge and skills, often evaluated at the labour market, years after graduation.

In our research project, we intend to address both technical quality (competence development) and functional quality (students evaluations about the delivery of the courses).

2.1. Competences and their development

Spencer and Spencer's iceberg model plays a central role in defining the notion of competence – this is the approach we accept during our research. Competences may be divided into competency levels; therefore, competences may be motivation, traits, self-concept, skill or knowledge. According to the iceberg model, skills and knowledge are the more visible parts of personality, while self-concept, traits and motivation are a lot more hidden characteristics in the core of personality [5]. We may also define the function of a competence as it transforms knowledge into action creating a bridge between knowing and realising something [5].

The other model we used in our research is the self - efficacy model of Albert Bandura. According to his theory, each individual has a kind of outcome and efficacy expectation based on how that person estimates his/her own abilities to act. "An efficacy expectation is the conviction that one can successfully execute the behaviour required to produce the outcomes" [6, p.193]. The social-cognitive theory of Bandura emphasises the role of environment, and in his opinion efficacy expectations can be developed by social learning. Efficacy expectations are based on four important sources of information: „performance accomplishments, vicarious experience, verbal persuasion, and physiological states." [6, p. 195.] Performance accomplishment is an especially important source of efficacy information, because it comes from successful mastery experiences. Vicarious experiences derive from seeing others perform. Verbal persuasion alone has limitations as a means of increasing of personal efficacy, „people who are socially persuaded that they possess the capabilities to master difficult situations and are provided with provisional aids for effective actions are likely to mobilize greater effort than those who receive only the performance aids" [6, p. 198.]. Physiological states, namely emotional arousal is a source of information that affects self-efficacy in coping with threatening situations and in reducing avoidance behaviour. Institutes of education and their training programs form students' perceived competences by shaping the environmental characteristics of learning.

2.2. Perceived quality

Conceptualizing and measuring service quality has been in the forefront of services marketing research, as providing quality service is essential for success in a competitive environment [7]. Nevertheless, service quality is a highly elusive construct, due to features of services such as intangibility, inseparability of production and consumption, heterogeneity and perishability [8]. We must differentiate between perceived quality and satisfaction: while the former is frequently considered to be an overall evaluation of the service, the latter is a transaction-specific and short-term attitude [9].

The work of Parasuraman et al [10] has been highly influential in the measurement of perceived service quality in a wide variety of services. They have captured service quality as a gap between the expectation and perceptions of customers and developed SERVQUAL, a 2*22-item instrument for measuring these. According to them, perceived service quality is a construct of five dimensions:

- tangibles (containing physical facilities and equipment , as well as the appearance of personnel);
- reliability (the ability to provide the promised service accurately);
- responsiveness (willingness to help customers);
- assurance (the courtesy and ability of employees to inspire trust and confidence);
- empathy (caring and individualized attention provided to customers).

However, defining service quality as a gap between expectations and perceptions has received considerable criticism. SERVPERF [11] maintains measuring the above five dimensions, but focuses

on perceived performance, neglecting expectations. Many authors agree that consumers' assessment of continuously provided services depend solely on performance, confirming that SERVPERF results are more reliable, and provide greater explained variance than SERVQUAL [12]. Measuring not only perception but also expectations provide more information for a exploratory research, though. It is not surprising therefore that there has been research using both SERVQUAL and SERVPERF in a higher education setting (see e.g. [3] [12] [13]).

3. Research methodology and early results

Due to the novelty of our research topic and the lack of previous examples, our research methods were improved continuously during the past few years. In 2011, we conducted focus group interviews with students and measured their level of satisfaction with the training courses. The only relevant result of these interviews showed us that students are satisfied with these courses.

In 2012, we conducted a quantitative research: we compiled lists of competences for each training course, based on special literature. We used these lists to measure students' own perceived competencies before and after trainings. We also measured changes in students' self-efficacy with an R. Schwarzer test containing 10 items, and sense of coherence with a 13-item version of Antonovsky's scale [14]. After cleaning the data and putting pre- and post- questionnaires of the same respondents in pairs, fifty students remained in the sample: 19 males and 31 females.

In the 2012 questionnaire study, we had two important results. We measured positive changes on our competence scales, but many of the items were concepts with which the students encountered at the training courses for the first time. So, we decided to modify the lists to measure more common, easy-to-understand competencies in the next year. Our second conclusion is related to the R. Schwarzer and to Antonovsky's test. The result of the self-efficacy scale showed significantly raised points due to the training in the pos-test compared to the pre-test. This is expected because self-efficacy should be higher after a successful training. Sense of coherence scale measures a more stable view of life what didn't change after few days of training. We don't believe our trainings will change participants' life like a magic wand, but if they reach a higher self-efficacy level and gather some competences, they may change more on the long run.

In 2013, we have started to use more simple competence lists and we ask narratives about the trainings' specific topics before and after them. We intend search for differences in the participants' problem-solving skills in training theme related situations. We measure changes in competences (technical quality) one week after trainings. This year, at the end of the semester we intend to measure functional quality as well. The development and testing phase of the SERVQUAL tool is still in progress. With the intention to capture the course-level perceived quality of the training courses, we have adapted the SERVQUAL approach – due to its ability to generate information on not only the evaluations of the actual service, but also about the expectations of students. Compared to the original scale, we have devised a significantly modified version of it, as higher education courses differ significantly from those types of services that were originally measured by the model. Nonetheless, we have managed to preserve the content of the five original dimensions, and have formulated 24 statements to be evaluated on a 5-point Likert scale. In addition, we used 4 items for measuring student satisfaction, including a question about the overall satisfaction of the course.

We hope that the new competence lists will cause much less confusion in the pre-test phase and that the SERVQUAL tool will give us more information about the gap between an ideal training program and our services.

4. Conclusion

It is not evident how to measure a higher education institution's course-level service quality. With the intention to grab both technical and functional quality, we are developing a methodology consisting of measuring the development of competences, as well as student experiences of the process. Our preliminary results show that competence lists of a specific training should carefully be created, as students lack understanding many concepts that are considered to be important in the specific literature. Our research thus continues with modified competence lists, measured before and after trainings to grab changes, and with an adopted version of the SERVQUAL scale.

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